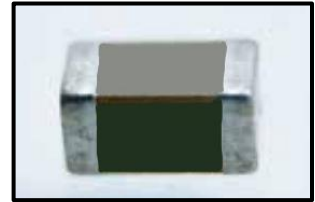


### ≠ Features

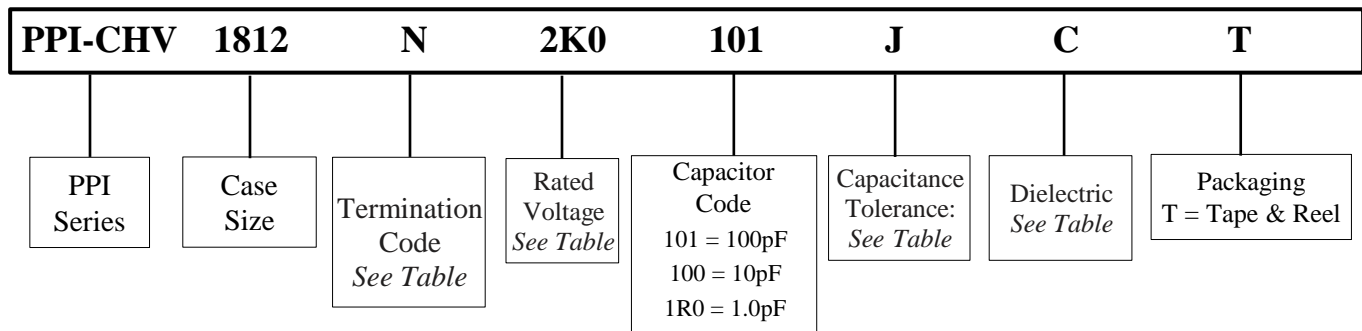
- Excellent volumetric efficiency and stability of capacitance with temperature
- High voltage capacitors
- Special internal electrode design for high voltage rating
- Surface mount suitable for wave and reflow soldering
- High Reliability
- RoHS Compliant

### ≠ Applications

- LAN/WLAN interface
- Back-lighting inverter, DC-DC converters
- Ballast, Modems and Power Supplies



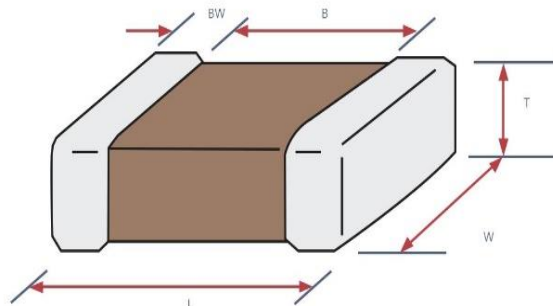
### ≠ Part Numbering



### ≠ Dimensions (mm)

Dimensions (mm)					
Size	L	W	T	B (min)	BW (min)
<b>1812</b>	4.60 ± 0.30	3.20 ± 0.20	*	2.50	0.30

\* See Capacitance Range charts on following pages





**≠ Terminations**

Code	Description
F	Silver Palladium
N	Nickel Barrier
A	High Leach Resistant Silver Palladium

**≠ Rated Voltages**

Code	Voltage	Code	Voltage	Code	Voltage
250	250V	1K0	1KV	4K0	4KV
500	500V	2K0	2KV	5K0	5KV
630	630V	3K0	3KV	6K0	6KV

**≠ Capacitance Codes**

Cap Code	Value	Cap Code	Value	Cap Code	Value	Cap Code	Value
5R0	5.0pF	101	100pF	103	10nF	105	1.0uF
100	10pF	102	1.0nF	104	100nF		

**≠ Capacitance Tolerances**

Code	B	C	F	G	J	K	M
Tol.	±0.1pF	±0.25pF	±1%	±2%	±5%	±10%	±20%

**≠ Dielectric Codes**

Code	C	X
	COG	X7R

**≠ Performance**

Dielectric Classification	C = COG / NP0 (Ultra Stable)	X = X7R (Stable)
Operating Temperature	-55°C to 125°C	-55°C to 125°C
Rated Voltage	250V – 6000V	250V – 6000V
Temperature Coefficient	≤±30ppmi/°C, -55°C ~+125°C (EIA Class I)	≤±15ppmi/°C, -55°C ~+125°C (EIA Class II)
Dissipation Factor	NP0: Q>1000	X7R: D.F. ≤2.5%
Insulation Resistance	10GΩ or 500/CΩ whichever is smaller	
Aging	NP0: 0%	X7R: Typically, 1.0% per decade of time
Dielectric Strength	100 ≤ V < 500V, 200% Rated Voltage 500 ≤ V < 1000V, 150% Rated Voltage 1000 ≤ V, 120% Rated Voltage	



**± PPI-CHV SERIES: 1812**

Dielectric		COG								X7R									
T (max)		1.8	1.8	2.6	2.2	2.6	2.6	2.6	2.6	2.7	2.6	3.0	3.0	1.8	2.2	2.7	2.7	2.7	
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	6000	250	500	1000	2000	3000	4000	5000	6000	
Cap Value	Code																		
2.0pF	2R0																		
3.3pF	3R3																		
3.9pF	3R9																		
5.0pF	5R0																		
8.2	8R2																		
10	100																		
12	120																		
15	150																		
18	180																		
22	220																		
27	270																		
33	330																		
39	390																		
47	470																		
56	560																		
68	680																		
82	820																		
100	101																		
120	121																		
150	151																		
180	181																		
220	221																		
270	271																		
330	331																		
390	391																		
470	471																		
560	561																		
680	681																		
820	821																		
1.0nF	102																		
1.2	122																		
1.5	152																		
1.8	182																		
2.2	222																		
2.7	272																		
3.3	332																		
3.9	392																		
4.7	472																		
5.6	562																		
6.8	682																		
8.2	822																		



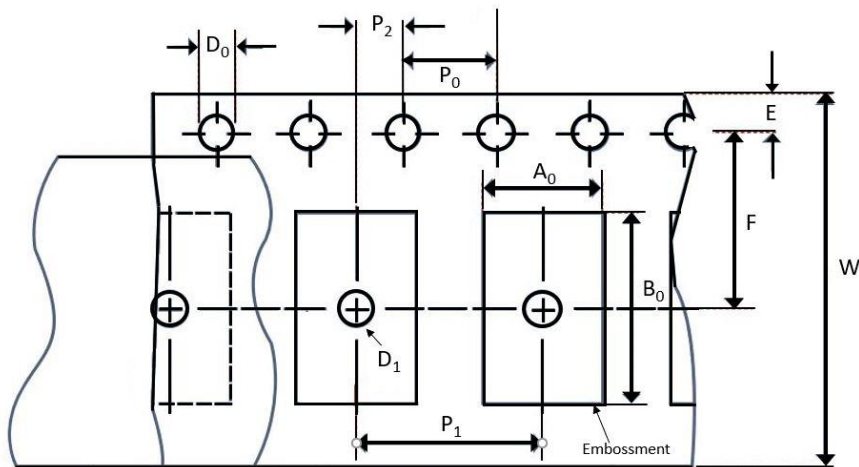
**± PPI-CHV SERIES: 1812**

Dielectric		COG								X7R								
T (max)		1.8	1.8	1.8	2.6	2.2	2.6	2.6	2.6	2.7	2.6	3.0	3.0	1.8	2.2	2.7	2.7	2.7
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	6000	250	500	1000	2000	3000	4000	5000	6000
Cap Value	Code																	
10	103																	
12	123																	
15	153																	
18	183																	
22	223																	
27	273																	
33	333																	
39	393																	
47	473																	
56	563																	
68	683																	
82	823																	
100	104																	
124	124																	
154	154																	
184	184																	
224	224																	
274	274																	
334	334																	
394	394																	
474	474																	
564	564																	
684	684																	
824	824																	
1.0uF	105																	
2.2	225																	

**≠ Packaging: Embossed Plastic Carrier Tape**

Size	Qty per 7" Reel	Qty 10/13" Reel
<b>1812</b>	500, 1000	2K

**≠ Tape & Reel Specifications**



Unit: mm

Size	W	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	Do	D <sub>1</sub>	E	F
1812	12.00 ± 0.30	4.00 ± 0.10	8.00 ± 0.10	2.00 ± 0.05	1.50 ± 0.10	1.00 ± 0.10	1.75 ± 0.10	5.50 ± 0.05

A<sub>0</sub> B<sub>0</sub>

- Determined by component size to minimize rotation.
- The component cannot rotate more than 20° within the determined cavity.